# **Riverfront Tree Management**

#### Introduction

The City of Radford has identified the riverfront as a major asset of the community, but there have been differing views of how to best use this resource. This report will review some of the issues raised in the debate that has lead up to this recommendation and provide a plan for managing this important area of the City.

Recent discussions about this topic arose when some members of the City Council expressed a desire to have a greater view of the river when walking or driving. This resulted in a discussion among members of Council, which was expanded when the pathways group took up the issue. Pathways sponsored a community forum about the importance of protecting the riverbanks and preserving it as natural habitat.

Concurrent with this community discussion, the City staff organized a working group to gather information about the issue and allow the staff to make a recommendation to the Council. This report is the result of that effort.

## Assumptions

During the discussion about management of the river, a wide variety of positions were identified and discussed. On one end of the spectrum, the riverbank could be cleared, replanted and managed as a manicured park or garden area. The other extreme would leave the area completely undisturbed and not allow for any improvements and little use by people. The first position is not practical due to maintenance expense and the potential for erosion problems. The alternative is also rejected because the river loses its utility for residents and the value of the river is largely lost to the community. Significant investments in the development of such things as parks, bikeways and other amenities could not be accommodated.

In developing this recommendation, the staff worked from the following assumptions:

- The river should have greater visibility.
- Areas along the river should be developed to allow for recreational uses for both residents and visitors. A diversity of uses should be accommodated, including walking, biking, fishing, picnicking, canoeing, boating and other related activities.
- Where possible useful plant species and habitat should be preserved.
- Sensitive areas where erosion is likely to occur should be identified and protected.
- The plan should be able to be accomplished with existing employees and should be sustainable over time. The plan must be for long term management, a one-time action will not address the problem(s).
- Visibility along the bike path is a major safety concern.

# Proposed management guidelines

The following recommended guidelines review the riverfront in sections beginning at the eastern edge of Bisset Park. Each is evaluated individually

# Throughout Study Area

Generally, in areas recommended for more active management, the City should attempt

to identify areas where access for wade fishing is attractive and provide an access point that will allow fishermen to reach the river but prevent damage to the banks through erosion. Construction of a series of steps from landscaping timber or other such materials would be appropriate. These areas should be identified with proper signage and printed guides to direct users to the provided access and to promote this use of the river. In addition to these access points, areas where users already have cut paths to the river should be identified and stabilized with similar construction to prevent further erosion damage. Throughout the area, trees are covered with vines which obstruct the view of the river. While in most cases these vines are not parasitic, vines such as poison ivy add little to the usefulness of the area. Efforts should be made to trim the vines at the base of trees to prevent further spread. Dead trees along the bike path should be removed that provide a safety hazard to users, but other dead trees should remain.



Large vine growing in tree.

## Bisset Park to Dudley's Landing



Wooded area

This area has the most potential of all surveyed to provide additional mixed use recreational opportunities. The most western portion of this area (from the Park to the beginning of Hunter's Road) is covered with canopy trees that provide a wooded area suitable for hiking and birding. This area should be considered for future development of a small nature trail. The bikeway will pass through this section,

requiring some clearing, but placement of the path should be sensitive to protecting large trees and useful species. The area adjacent to the road has become overgrown with vines and brush that obstruct the view into the woods. This area should be cleared by mowing or by hand to allow for a view into the wooded area as well as to provide a view of the path from the road for public safety.



Brush obstructing view.

The second portion of this section runs from the beginning of Hunter's Road to Dudley's

Landing. This area is characterized by a shelf that lies below the road level but above the river. This area has a mixture of trees and brush. The brush and vines on this shelf should be removed by hand to allow a more open and accessible area as well as to improve the sight lines to the river. If properly maintained this area should provide some areas of very high river visibility.

The Dudley's Landing area has been proposed for significant improvements (see attachments),



Shelf area covered with brush

including facilities for a boat access, picnicking, vendor kiosk, and parking for all of these uses. The bike path will also cross this area. Construction of these facilities will require significant cutting. The picnic area should be designed to use the existing trees for shade and increased enjoyment of the facilities. Large trees in this area should be saved if possible, but a significant area will need to be cleared for parking. Visibility for vehicles leaving the ramp and parking areas must be considered to avoid accidents with traffic along Hunter's Road.

## Dudley's Landing to Veteran's Field

The first area within this section is leased for the driving range facility. This area has been leased to a private individual and he is responsible for its maintenance. The City has retained easements for the roadway and the bike path, but does not mandate how the



Sensitive area prone to erosion.

property will be maintained. Construction of this portion of the path will require some removal of trees and plant materials, but this should be done to minimize negative impact on large trees or unique species. The City should work with the operator of the range to provide for visibility of the bike path from the road for public safety.

The area immediately west of Veteran's field would provide an opportunity to do selective clearing to provide a river viewshed, but the

banks across from the ball fields are steep and prone to erosion problems. This area has been identified as sensitive and should be protected. Without adequate protection, erosion will threaten the road and bike path.

#### Veteran's Field to Dedmon Center

The area from Veteran's Field to the Radford University field events facility can best be described as a thicket. This growth is the result of previous clearing and lack of management thereafter. The growth is extremely thick and does not allow for visibility or many uses, nor does it allow desirable species to develop. This area will be cleared to allow for construction of the bike path. The surrounding thicket should be thinned to allow for visibility of the path from the road and to provide visibility of the river from the



Thicket

path. In clearing the thicket, care should be taken to identify trees that will be encouraged to grow and provide shade and a future wooded area. In some areas, planting may be needed to provide for appropriate types of trees to enhance the area.

The region along the river from the Radford University javelin field to the Fraternal Order of Police will also contain a section of the bike path. This portion of the path diverges

significantly from the road. Construction of the path will require the removal of some trees and plants, but this should be done in a manner that preserves significant specimens. Care will have to be taken in this area to provide visibility for safety of the users. Riders should be visible from the buildings and facilities along this section of the river. The bikeway will join University Drive with a park and ride lot near the Dedmon Center.

#### **Conclusion**

These recommendations attempt to take into account the concerns of most members of



Erosion from improper use.

the community. It is important for the City of Radford to continue to develop the riverfront for a variety of uses so that it will provide enjoyment to residents and visitors alike. This report provides a framework for management of the riverfront that along with construction of the bike path will significantly enhance the river. It is anticipated that with increased use, more destructive behavior such as rutting from off road vehicles and the resulting erosion will be curtailed. Through proper management, the river can become an even more important part of life in Radford

The recommendations within the report are the responsibility of the staff, but a number of individuals assisted in its development. We would like to acknowledge the assistance of the following in providing very valuable information and insight into areas that should be considered.

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